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ABSTRACT

This study sought to determine if general parent education, in the form of books and workshops, was an effective intervention in cases of moderate parental distress due to difficult child temperament. The parents of six "difficult" children answered questionnaires and were interviewed over several years concerning their child's temperament and its effects. They also participated in general parent education workshops and other educational activities that included information on temperament and child behavior. The study found that, soon after the intervention program began, parents: (1) were reassured that their child's behavior, although not average, was still normal; (2) attributed the child's problem behaviors to innate characteristics, thus reducing blame and defensiveness; (3) reframed temperament traits as positive attributes, given the right context; and (4) worked to increase the "goodness of fit" between the child and his/her environment. (Contains 12 references.) (MDM)

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Non-Clinical Interventions for Families with Temperamentally Difficult Children

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Abstract

Temperamentally difficult children often cause family disruption. Although some families may need counseling, many can benefit from less intensive interventions. This paper describes six cases in which parents attended brief workshops and/or read parenting books focusing on temperament. Interviews, written reports and observations indicate that parent and child cognitions and behaviors undergo changes much like those that occur during therapy. These changes have lasted up tto five years.

Non-clinical Interventions for Families with Difficult Temperament Children

Introduction

The temperamentally difficult child typically exhibits a pattern of behaviors that is distressing to parents, often including intense negative emotions, low levels of adaptability or behavioral inhibition, and attention demandingness (Bates et al., 1994). These behaviors may present no problems to some parents--a good "fit" between parent and child or an understanding of individual differences may prevent problems. These families need no intervention. On the other hand, some parents may have such trouble raising their child that they need counseling. These families need a trained clinician well-versed in temperament concepts.

Between those extremes lie families who are having moderate problems due to the difficult temperament of their child. These problems are not severe enough to lead families to a clinical psychologist, but they certainly have a negative impact on family life. More importantly, these moderate problems can evolve into more serious problems if destructive labelling and behavior patterns set in (Thomas & Chess, 1977). Bates et al. (1994) suggest that proportional intervention approaches (mild interventions for mild problems, etc.) might serve a useful preventive function.

Several researchers have advocated the general education of parents about temperament. Carey (1989) suggested that pediatricians discuss temperament with parents during regular visits, using temperament rating scales to help give the parents insights into their child's behaviors. The Kaiser-Permenante HMO sends home information after regular pediatric clinic visits, based on temperament

measures and developmental issues. They found that personal advice rather than written information was especially important for more difficult children, especially around separation issues (Cameron and Rice, 1986).

Temperament has also become the focus of more general parent education efforts. Books on child temperament (Turecki and Tonner, 1985; Kurcinka, 1991) have appeared on the parenting shelves of mall bookstores, next to books on discipline, hyperactivity, and child nutrition. Parent workshops on temperament are sponsored by local schools and hospitals. These low-intensity interventions might fill an important niche in the temperament counseling field for those families who are experiencing only moderate temperament-related problems, but their effectiveness must be assessed.

Differences In Clinical vs. Non-Clinical Situations

In a typical clinical intervention (as reported by Bates, 1989; Bates et al., 1994; and Thomas & Chess, 1977) the first step is to identify the presenting problem as due to child temperament. Then parents are educated about temperament, with an emphasis on those aspects most relevant to their situation. The clinician attempts to change parental attitudes and behaviors in ways that bring about the desired change in child behavior. This process is accomplished through discussion and feedback and occurs over a period of weeks or months.

In contrast, the typical non-clinical intervention consists of reading a book or attending a brief workshop. The parents are presented with descriptions of the difficult child and perhaps a brief questionnaire. Then parents are told about the biological basis of temperament, how to deal with individual traits and how to deal with more general temperament-based problems. Parents must decide how to apply

the information to their own situation.

A more careful look at each step involved clarifies the differences between these two approaches.

First is the identification of children with difficult temperament. In clinical interventions, parents typically come with a presenting behavioral problem such as fears and withdrawal or emotional outbursts and misbehavior. The clinician who suspects temperament on the basis on parental interview would use one of the available standardized questionnaires (e.g. Carey & McDevitt, 1978) along with information from interviews and possibly observations to assess the child's temperament. Parent education methods rely entirely on parental judgment to assess temperament. Using verbal descriptions of temperamental traits and very brief questionnaires, parents must decide for themselves whether the difficult temperament concepts apply to their child.

The second aspect of intervention is the transmission of information. In a clinical setting, the clinician instructs the parents in those aspects of temperament that seem most relevant to their situation. This information is often given over an extended period of time. There is ample opportunity for the clarification of misunderstandings. Parent education relies heavily on group teaching techniques, primarily books and workshops. A large amount of information must be covered in a single book, presentation, or a brief series of workshops. There is often no opportunity for feedback or clarification.

A third aspect of intervention is the intended clinical effect on the parent and child. Clinicians try to change cognitions, behaviors, or both. They can work with

a family over a period of time, concentrating more effort and using new strategies when needed. In contrast, parent education is usually a "one shot" intervention. Parents must translate the information into action that suits their situation. If the action does not produce results, the entire concept may be discarded rather than modified.

The final aspect is the long term outcome of the intervention. In clinical interventions, parents often return after a period of time to assure that they are maintaining positive changes. When new developmental issues emerge, the clinician may be consulted for guidance in applying temperament concepts to these new problems. In some programs (e.g. the Kaiser-Permenente program) parents may be contacted when developmental issues are expected to arise. Parents relying on books or workshops can re-read their materials with the new problems in mind, but do not have access to an expert to help them adapt the methods to new situations.

Research Questions

Can general parent education in the form of books and workshops be an effective intervention in cases of moderate distress due to child temperament? Is non-clinical parent education about temperament effective in helping parents cope with difficult children? Related questions are: (1) Is informal identification of difficult temperament accurate? (2) In what ways is non-clinical intervention helpful? (3) Does this type of intervention have a long-lasting effect?

Methods

Context

During the past five years, I have given lectures and workshops about temperament

as part of university courses, at local schools, and at conferences for parents and teachers. The information presented is general: the concept of temperament is outlined, the nine traits are described, and strategies are suggested to improve goodness-of-fit between the child and the environment. Parents and teachers who want more information are referred to the Turecki and Kurcinka books. Informal feedback has been extremely favorable, with many parents telling me that this information changed their family interactions dramatically.

I am also asked for parenting advice in other contexts such as positive discipline workshops, university classes, or informally when people know that I study parenting. Sometimes our conversations suggest that temperament is playing a role in their child's problems. When that occurs, I give brief information about temperament and recommend the Turecki and Kurcinka books. Here, too, informal feedback has been very positive.

In several instances, I have been able to elicit more detailed information from parents, including temperament questionnaires and extended descriptions of child behavior. Several of these parents have consented to my use of this information for this paper.

I used a case study methodology to answer my research questions. Following the advice of Yin (1994), I selected several families with difficult children about whom I had multiple sources of information. The use of converging measures (questionnaires, interviews, and observations) within cases provided internal validity. The comparison of six different cases provided replications, or reliability, as well as some assurance of generalizability.

Subjects

Each case consisted of a child with difficult temperament (as identified by the mother) and his or her family. The "difficult" children in these families were from birth to 5 years old (an average of 3.6 years) when their parents first learned about temperament and presently range in age from 5 to 11 (average of 7.5 years). Data covers their behaviors from birth to the present. There were 4 girls and 2 boys. All are Caucasian with income level varying from lower-middle to upper class. The mothers' education level averaged four years post-high school. One parent is a single mother, with the divorce occurring between the preliminary and final interviews.

Insert Table 1 about here

Procedures

Parents were interviewed when they came to me with an interest in obtaining more temperament information. Two mothers wrote this information to fulfill a course writing assignment. All mothers took home questionnaires which were completed and returned to me. Then they were asked to read the Turecki & Tonner (1985) or Kurcinka (1991) books on temperament. Follow-up information was obtained during interviews after the parents had had time to read and implement the suggestions from the books. When I contacted parents to obtain informed consent to use their information in this paper, all of the parents provided extensive updates on their child and family.

Measures

Mothers provided all interview and questionnaire information, although mothers

frequently reported on the fathers' responses and behaviors. (Both men and women are present at lectures and workshops, but only mothers have contacted me informally.) All mothers completed an age-appropriate temperament scale, either the Infant Temperament questionnaire (Carey & McDevitt, 1978), the Toddler Temperament Scale (Fullard, 1984), the Behavioral Style Questionnaire (McDevitt & Carey, 1978) or Martin's TABC (1988). All but one also completed the Parent Stress Index (Abidin, 1986). In three of the cases I was able to observe the child in their home on repeated occasions.

Mothers were interviewed at least twice about their child's temperament. The open-ended questions included (but were not limited to):

What made you think there was a problem with your child?

What did you think caused this problem?

What were you doing about this problem before you learned about temperament?

How was it working?

What effect did the temperament information have on you?

How did this information change things?

Did your child change? Did specific problems disappear?

Have these changes lasted?

Data Analysis

Using a case study methodology (Yin, 1994), I examined my interview, observation, and questionnaire data for evidence related to each of the research questions. When possible, I coded the data into categories and indicated the frequency or intensity of the information so that I could look at patterns within and

across cases. In the following sections, I present data and summary charts for each research question, along with relevant comments from the parents.

Results

Identification of Difficult Temperament

In the parent education paradigm, parents must identify their own children as having a difficult temperament. In this study, identification of temperamentally difficult children came primarily through two sources. First, some parents are quick to recognize their own child in the descriptions given in workshops. These parents are easy to spot in the crowd because of their extreme head-nodding and growing excitement as I describe the difficult child. Some of the parents in this study were among those who came up to talk to me after a temperament presentation.

A second source of cases was parents who contact me for general parenting advice, either informally or through positive discipline workshops. Most of these parents describe problems that are age/stage-related or due to poor parenting practices. When problems could not be attributed to those factors, I asked a few brief questions related to temperament traits such as: How does your child respond to new situations? How would you describe his/her general mood? Are his/her emotions usually low-key or intense? Does she/he have much of a "body clock?" As in the workshops, some of the parents would get very excited as I described their child.

Of these "parent-identified" cases, further testing with full temperament scales showed that they did, indeed, have a child with a difficult or intermediate-high temperament as defined by Thomas and Chess. That is, the child scored at least one

standard deviation above the mean on most of the key traits. (See Table 2 for complete scores.)

Interview data and observations also confirmed their temperament. (See Table 3) Intensity and adaptability seem to be the most central traits.

Insert Tables 2 and 3 about here

Many of the mothers' comments and my observations related to emotional intensity, particularly negative emotions. These children were colicky when young, had unusually long tantrums as toddlers, and were described as very moody.

> Michael can be described as high strung, moody, demanding, stubborn, argumentative, inflexible, strong-willed, energetic, fun, loving and compassionate. When he is well-behaved he is a joy to be with, but when he is poorly behaved he is like a volcano erupting. There is no middle of the road with his conduct. One of the ways that Michael reacts to stress is through uncontrollable bursts of energy. He will start to run through the room screaming, climbing on furniture or on people, and knocking things down or throwing them. (Michael's mother, initial report)
>
> I don't think I ever heard her whimper. It was always full screams. When she woke up, she would scream until we came in. By then, she was too upset to calm down. It was a rotten way to start the morning!
>
> (Amanda's mother, initial report)

A second theme was lack of adaptability. Difficult children are often upset by changes in routine and have difficulty with transitions between activities. Lisa's

teacher complained that Lisa would not change activities without resistance. Michael's mother described him as a creature of habit and said that any change in routine is difficult for him.

> We had great difficulty with transitions. She would cry when I put her coat on to go outside, and she would cry when we came back in. Now that she is older, I can count on some adjustment time when we come back from vacation or some other change to the routine. She can handle the change at the time, but she needs some extra "coping time" when it's all over.
>
> (Amanda's mother, initial report)

> We have to follow the same route every time we go to my parents' house. If I go a different way, she is very upset and agitated until and go back and drive the 'correct' route.
>
> (Erin's mother, initial interview)

A low sensory threshold and fearful responses were also associated with difficult temperament, and were frequently cited by mothers as a cause of problems.

> Lisa would get easily overstimulated by too many people, loud noises, bright lights and too much activity. She would react by suddenly becoming fearful and she would start screaming.
>
> (Lisa's mother, initial report)

Another source of identification of difficult temperament was the reactions of other people to the child. These people did not use the concept of temperament, but they did communicate their negative reaction to the child's behavior. These negative reactions were also a major source of stress to the mothers, since the implied or stated message was that the child's problem behavior was somehow the mother's

fault.

> Visiting with in-laws has been a constant source of tension. They have very different views of raising children and I get defensive around them. On the other hand, it is no problem to visit my parents. They accept temperament and realize that we don't have total control over her behavior.
>
> (Amanda's mother, initial report)
>
> During parent-teacher conference, the teacher was at a loss as to how my daughter should be handled. She questioned me as to what family problems were contributing to her behavior and suggested a medical evaluation as well as a psychological one. It was such a discouraging evaluation because I could not understand why my child was the only one not adapting to school.
>
> (Lisa's mother, initial report)
>
> My husband feels that because I gave Michael so much attention and made our time together such a priority, that this is why Michael demands my attention.
>
> (Michael's mother, initial report)

Steps of Intervention

Parents reported immediate relief upon learning about the temperament concept.

Insert Table 4 about here

Within several weeks, they were seeing changes in the family as they worked to improve the "goodness of fit." According to the parent interviews, intervention

worked in the following ways and in the following order:

1. Parents were reassured that their child's behavior, although not average, was still normal.

Many of the parents had been worried that their child was psychologically disturbed. They reported enormous relief when they realized that this was within the bounds of normal behavior and that other children acted this way.

> Turecki's description of a typical day was right on target—it feels so wonderful to know that other moms are going through this, too!
>
> (Edward's mother, follow up interview)

> I can deal with the problem behavior, just knowing that it's ok. I guess I knew deep inside she was ok, but everyone was telling me that she wasn't. So that meant that we weren't good parents--but I was pretty sure that we were.
>
> (Helen's mother, follow-up interview)

> We've wanted her to be excited about new activities and enthusiastic like her older, easy-going, seven year old sister, however, we now understand that she is her own person with completely different ends.
>
> (Lisa's mother, follow up report)

2. Parents attributed the child's problem behaviors to innate (possibly genetic) characteristics, thus reducing blame and defensiveness.

Most said that before learning about temperament, they thought that either they were inept parents, or that their child had serious problems or was deliberately causing trouble. After parent education, they moved from blame to problem-solving.

> Now that I don't have to worry about who is doing something wrong, we can just focus on how to solve the problem. It's just like whether her hair is straight or curly—you accept it whenever you can, and you work together when you have to make a change.
>
> (Helen's mother, follow-up interview)

> The main effect of learning about temperament was the change in our attitudes. Instead of thinking of her as this rotten child who was trying to drive us crazy, we saw that her problems were beyond her control. It helped to see that she was so much like me.
>
> (Amanda's mother, follow-up report)

> Because of my husband's and my very different temperaments, we have very different conflicts with Michael. . . . compared to his father, Michael's extreme behaviors would be classified as moderate. Dealing with these traits are something that I have adapted to and accepted in my husband. So when Michael displays them, they really do not bother me.
>
> (Michael's mother, follow-up report)

3. Parents reframed temperament traits as positive attributes, given the right context.

Parents were quick to see that some of their child's "problem" traits could be strengths in adulthood.

> I never thought of Amanda's persistence as good—it just drove me nuts. But watching her persistence when she learned how to roller skate, I could really see the good side of it.

(Amanda's mother, follow-up report)

> I would also like to add that Lisa can also be very energetic, creative, enthusiastic, positive and humorous. She is an interesting child because of her individualism as much as she is a difficult child because of this same quality.

(Lisa's mother, follow-up report)

4. Parents worked to increase the "goodness of fit" between the child and his/her environment.

Once temperamental traits had been identified, parents tried to increase the "fit" between child and environment. Particular success was noted with sensory threshold issues, as parents learned to block out light from around curtains to let children sleep and to buy soft or "gently used" clothing. Michael's mother worked successfully with his grandfather, whose boisterous play had driven her son to tears many times. Problems with withdrawal were often successfully met by carefully and slowly preparing the child for new experiences. One mother also commented that she now consciously "calmed down" other aspects of her son's life when he was experiencing something new, like the first weeks back in school. This seemed to help ease transitions.

> One technique from Turecki that we found helpful is labeling. When I took Michael to nursery school this week, he did not want to go into the classroom because people would look at him and he would not know anyone. For me to calmly say, "I know it is hard for you to meet new people" and "I know it takes time for you to get used to a new class," helped to calm him down and alleviate some stress. This technique has been

beneficial for us when dealing with all temperamental traits.

(Michael's mother, follow-up report)

We are both at our worst in the morning. We would fight over everything. Finally we changed the schedule. My husband (a cheerful early riser) gets up with the girls, fixes their breakfasts, and packs their lunches. Meanwhile, I stagger into the shower and get dressed. By the time Amanda and I meet face-to-face, we've had time to wake up.

(Amanda's mother, follow-up report)

These four mechanisms are very similar to those outlined by Bates (1989) in his description of the use of the temperament concept in clinical situations. This suggests that temperament education helps parents in a similar fashion whether presented in a clinical or non-clinical situation. Of the four, changes in the goodness of fit were mentioned most often as helpful, particularly in the longitudinal cases.

In Erin's case, the problem behavior seemed too severe to be dealt with non-clinically and her parents were referred to clinicians. According to her mother, Erin's difficult temperament was exacerbated by their marital problems. Even so, her mother reported that knowing about Erin's temperament was tremendously helpful to her during that time.

The concept of temperament has been the single most inspiring, hopeful idea that has gotten me through the past three years. It let me know that I am not a bad mother, and that Erin is not a bad kid.

(Erin's mother, follow-up interview)

Longterm Effectiveness of Parent Education

In these longitudinal cases, the beneficial effect has lasted up to the present time, which has been five years for three of the children. I called several of these mothers to ask if they would be interested in joining a parents' support group for difficult children. They declined, saying that they really didn't have any problems with temperament anymore. The children still had many of the original behaviors, but the family now accepted them or had learned to work around them. Amanda's mother completed a second PSI. The child scale, which indicates the level of a number of stressful child behaviors, had changed very little in several years. In contrast, the parent score indicating the level of stress the parent is experiencing had dropped significantly and was now within the average range.

> By now, we talk openly about temperament in terms of traits and also the "whole package." We talk about how these can be good traits when channeled properly. Amanda feels comfortable with who she is, and seems glad to learn why she acts the way she does and how to handle things in the best way. We try hard not to let temperament become an excuse for poor behavior. But we do talk about goodness of fit and how we can improve it.
>
> (Amanda's mother, follow-up report)

Some of the older children have learned to use the temperament concept themselves to predict and ease problems. Amanda often asks to visit new places (camp, school) early so that she can "get used to it slowly." They have learned to use self-calming strategies to cope with intense negative emotions.

> The older Lisa gets, the more she is able to deal with and understand her own frustrations.
>
> (Lisa's mother, long term follow-up report)

The changes prompted by temperament education often had a positive effect on the whole family. Several families reported that grandparents and others had commented favorably on the changes in their child's behavior. Eric's mother bought an extra copy of Turecki and Tonner's book for *her* mother, so that she would understand her grandson better. This positive feedback seems likely to encourage parents in their efforts to understand and support their children.

> Identifying these behaviors as related to temperament has allowed me to become more neutral in my attitude and more sympathetic and understanding of temperament related behavior. Now that we have a basic understanding of our daughter, we can hopefully become better at managing her behavior fairly and recognizing the difference between behavior related to temperament and manipulative behavior in order to set up fair limits and rules and enforce effective discipline techniques. . . . This information has made a tremendous difference in our lives. It has changed our family dynamics in a more positive direction.
>
> (Lisa's mother, long term follow-up report)

Summary and Implications

Is non-clinical parent education about temperament effective? The results of this study suggest that brief interventions in the form of workshops and reading "trade" books are indeed valuable. Parental identification of difficult temperament was confirmed by the results of standard temperament questionnaires. These non-

clinical interventions helped in many of the ways that clinical interventions help, such as by reducing blame and defensiveness and helping parents increase the goodness-of-fit between child and environment. Finally, the positive results seem to be long-lasting. These findings suggest that books and workshops can be very helpful to the parents of difficult children.

However, there are definite limits to these non-clinical interventions. Professional help is probably indicated when temperament is extremely difficult, when there is a poor "goodness-of-fit" between child and family, or when there are other complicating factors such as family stress.

Based on this research, I would make several suggestions regarding non-clinical interventions for parents:

1) Continuation of parent workshops and trade books. These non-clinical interventions were very effective for most of the parents I studied. These were parents who definitely were having problems with their children, but the problems were not severe enough to seek clinical help.

2) Inclusion of temperament information in more general books and workshops for parents, particularly those on discipline. When parents are having problems, they are likely to seek discipline information but may not know to seek information on temperament.

3) All workshops and books should include guidelines about when to seek professional help. (The Turecki and Tonner and the Kurcinka books do include this information.) Of course, parents can be urged to seek professional help when these strategies don't work, but more specific guidelines would be helpful.

For future research, an interesting question concerns the impact of outsiders on the families of difficult children. Mothers in this study were very distressed about the comments and advice of others, particularly grandparents. A family systems perspective might provide some interesting insights into these families.

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Table 1

Summary of subject information

Child	ages discussed	age at inter-vention	Temp. scale	Parent Stress Index	Interviews	Observation
Lisa	0-7	5	X*	X	X	
Alicia	0-11	6	X*	X	X	X
Michael	0-5	3.5	X*	X	X	
Helen	0-9	4	X**		X	X
Edward	0-5	3	X*,***	X	X	X
Erin	0-9	4	X*	X	X	

* McDevitt & Carey Temperament Scale (Preschool)

**Martin's Temperament Assessment Battery for Children (School age)

***Carey & McDevitt Infant Temperament Questionnaire

Table 2

Confirmation of Parent Identification of Difficult Temperament

	Temper-ament	PSI-child	In-depth interview and observation data (x=mentioned; xx=mentioned several times; xxx=emphasized)						
	diagnostic cluster	z-score	appr/ with	adapt	intens.	mood	persist	thresh.	Outsiders*
Lisa	difficult	2.04	x	xx	xx			x	xx
Alicia	difficult	3.63	xx	x	xxx	xx	x	xx	xx
Michael	difficult	2.46	x	x	xx		xx		xx
Helen	difficult	--	xx	x	xx	xx		xx	x
Edward	inter. high	1.77		x	x	x	xx		x
Erin	inter. high	3.31	xxx	xxx	x		xxx		xx

*Negative reactions from others outside the family to the child's behavior

Table 3

Temperament subscales in z-scores

z-score	active	rhythm	ap/with	adapt	intens.	mood	persist	distr.	thresh.
Lisa	.08	-.12	3.2	2.39	1.63	1.13	.33	.63	1.85
Alicia	-.13	1.35	1.95	.86	1.77	2.74	.77	2.11	1.87
Michael	1.31	.18	.36	3.31	2.09	1.5	.19	-.48	1.4
Helen*	-1.4		1.9	1.5	2.0		-.03	-2.4	
Edward	1.2	-.62	1.18	1.67	.74	1.63	.33	-.23	-.42
Erin	-.33	2.99	3.02	3.53	-.03	2.49	1.64	-.73	-.3

*Martins TABC

Table 4

How intervention helped, as reported by parents

	relief in normality	change in attribution	reframe as positive	goodness of fit
Lisa	xx	x	x	xx
Alicia	x	x	xxx	xx
Michael	x	x	xx	xxx
Helen	x	xx	x	xx
Edward	xx	x	xx	xx
Erin		xxx		

(x=mentioned; xx=mentioned several times; xxx=emphasized)